

II. CLAIM AMENDMENTS

1. (Currently Amended) A ~~telecommunications system comprising, which comprises an~~ office network and an operator network and a local area network between them, wherein the office network comprises:

at least one mobile system terminal,

a base transceiver station,

a radio access gateway controlling the base transceiver station and having adapted to ~~have a functional connection with the local area network, the radio access gateway comprising a traffic handler functionality configured to detect the establishment of an internal data connection in the office network, which data connection uses a GSM protocol and configured to adapt TRAU frames of said mobile system to RTP frames to~~ be used in the local area network,

a call control entity, ~~which is configured to control said radio access gateway through a signalling connection on the basis of information about detection of the establishment of the internal data connection, received from said traffic handler functionality;~~

a data call interworking function, to which a signalling connection from said call control entity is arranged and which data call interworking function is ~~configured to adapt the~~ RTP frames coming from the radio access gateway to the data protocol according to said office network through at least two data rate adaptations, in response to the call control entity informing of the establishment of an internal GSM data connection in the office network, at least the second party of the data connection being a GSM terminal, the data call interworking function being further ~~configured to route the GSM data connections to their destination address in the office network; and~~

the operator network is ~~configured to adapt data transmission between the office network and a public land mobile network together.~~

2. (Currently Amended) A telecommunications system as claimed in claim 1, further comprising

a location database for registering terminals belonging to the office network and for managing location and subscriber information,

and in response to a data connection establishment request made by the terminal, the call control entity is ~~configured~~ to authenticate the subscriber of the terminal and alternatively;

to direct the radio access gateway to route the data connection to said data call interworking function in response to said subscriber of the terminal being registered into the office network, or

to direct the radio access gateway to route the data connection through the operator network to a switching centre of the public land mobile network in response to the fact that the subscriber of the terminal is not registered into the office network.

3. (Currently Amended) A telecommunications system as claimed in claim 1, wherein said office-specific base transceiver station, radio access gateway and data call interworking function are implemented as one element of the telecommunications system.

4. (Currently Amended) A telecommunications system as claimed in claim 1, wherein said radio access gateway and data call interworking function are implemented as one element of the telecommunications system in such a manner that the element is ~~configured~~ to control one or more office-specific base transceiver stations.

5. (Currently Amended) A telecommunications system as claimed in claim 1, wherein

said office-specific base transceiver station, radio access gateway and data call interworking function are implemented as separate elements of the telecommunication system in such a manner that the radio access gateway is ~~configured to control one or~~ more office-specific base transceiver stations.

6. (Currently Amended) A ~~telecommunications~~ system as claimed in claim 1, wherein said data protocol of the office network is a H.323 protocol.

7. (Currently Amended) A ~~telecommunications~~ system as claimed in claim 1, wherein a remote access server is ~~configured to function as an interface between the office network and the local area network, and the data call interworking function is configured to transmit user data adapted to frames according to the data protocol of the office network to the remote access~~ server network.

8. (Currently Amended) A ~~telecommunications~~ system as claimed in claim 7, wherein a terminal registered into the office network is ~~configured to establish a data connection to said remote access server from outside said office network as a dial-up connection.~~

9. (Currently Amended) A ~~telecommunications~~ system as claimed in claim 7, wherein a terminal registered into the office network is ~~configured to establish a data connection to said remote access server from outside said office network as a virtual private network (VPN) connection.~~

10. (Currently Amended) A ~~method of establishing a data connection in a telecommunications system which comprises an office network and an operator network and a local area network between them, the office network comprising at least one~~

~~mobile system terminal, a base transceiver station, a radio access gateway controlling the base transceiver station and adapted to have a functional connection with the local area network, a call control entity, a data call interworking function to which a signalling connection from said call control entity is arranged, the method comprising:~~

detecting the establishment of an internal data connection in an the office network by a traffic handler functionality of a ~~said~~ radio access gateway, which data connection uses a GSM data protocol,

informing a ~~said~~ call control entity about detection of the establishment of the internal data connection,

controlling said radio access gateway by the call control entity through a signalling connection to adapt TRAU frames of a ~~said~~ mobile system to RTP frames to be used in a the local area network,

adapting data connections according to the RTP frames coming from the radio access gateway to the data protocol according to said office network through at least two data rate adaptations, in response to the fact that the call control entity informing of the establishment of an internal GSM data connection in the office network, at least the second party of the data connection being a GSM terminal, and

adapting the data transmission between the office network and a public land mobile network together in an ~~said~~ operator network.

11. (Currently Amended) A method as claimed in claim 10, wherein

a ~~the~~ telecommunications system comprises a location database for registering terminals belonging to the office network and for managing location and subscriber information, and the method further comprising:

authenticating a ~~the~~ subscriber of the terminal in the call control entity in response to the data connection establishment request made by the terminal, and alternatively

directing the radio access gateway to route the data connection to a said data call interworking function in response to the fact that said subscriber of the terminal is registered into the office network, or

directing the radio access gateway to route the data connection through the operator network to a switching centre of the public land mobile network in response to the fact that the subscriber of the terminal is not registered into the office network.

12. (New) A device comprising:

a radio access gateway comprising a traffic handler to detect the establishment of an internal data connection in an office network, which data connection uses a GSM protocol to adapt TRAU frames to RTP frames,

a call control entity, which controls said radio access gateway through a signaling connection on the basis of information about detection of the establishment of the internal data connection, received from said traffic handler functionality; and

a data call interworking function, to which a signaling connection from said call control entity is arranged and which data call interworking function adapts the RTP frames coming from the radio access gateway to a data protocol according to said office network through at least two data rate adaptations, in response to the call control entity informing of the establishment of an internal GSM data connection in the office network.

13.(New) A device as claimed in claim 12, further comprising

a location database for registering terminals belonging to the office network and for managing location and subscriber information,

and in response to a data connection establishment request made by the terminal, the call control entity is to authenticate a subscriber of the terminal and alternatively:

to direct the radio access gateway to route the data connection to said data call interworking function in response to said subscriber of the terminal being registered into the office network, or

to direct the radio access gateway to route the data connection through an operator network to a switching centre of the public land mobile network in response to the fact that the subscriber of the terminal is not registered into the office network.

14. (New) A device as claimed in claim 12, wherein

said office-specific base transceiver station, radio access gateway and data call interworking function are implemented as one element of a telecommunications system.

15. (New) A device as claimed in claim 12, wherein

said radio access gateway and data call interworking function are implemented as one element of a telecommunications system in such a manner that the element is to control one or more office-specific base transceiver stations.

16. (New) A device as claimed in claim 12, wherein

an office-specific base transceiver station, radio access gateway and data call interworking function are implemented as separate elements of a telecommunication system in such a manner that the radio access gateway is to control one or more office-specific base transceiver stations.

17. (New) A device as claimed in claim 12, wherein

said data protocol of the office network is a H.323 protocol.

18. (New) A device as claimed in claim 12, wherein

a remote access server is to function as an interface between the office network and a local area network, and the data call interworking function is to transmit user data

adapted to frames according to the data protocol of the office network to the remote access server.

19.(New) A device as claimed in claim 18, wherein

a terminal registered into the office network is to establish a data connection to said remote access server from outside said office network as a dial-up connection.

20.(New) A device as claimed in claim 18, wherein

a terminal registered into the office network is to establish a data connection to said remote access server from outside said office network as a virtual private network (VPN) connection.